20

What is claimed is:

1. A method of load-balancing a network comprising the steps of:

establishing a primary LNS, a peer LNS and a LAC, wherein said primary LNS includes

5 state information;

coupling the primary LNS, the peer LNS, and the LAC to a network;

transmitting first information from said CPE to said LAC;

establishing a first tunnel between said LAC and said primary LNS and transmitting said

first information through said tunnel;

determining whether said primary LNS is overloaded;

offloading said state information directly from said primary LNS to said peer LNS via

said network;

in response to said determining step, establishing a second tunnel from said LAC to said

peer LNS using said state information; and

transmitting second information from said CPE to said LAC and through said second

tunnel.

2. The method of claim 1 comprising the further step of:

requesting a switchover from a primary LNS to a peer LNS.

3. The method of claim 1 comprising the further step of

detecting whether the primary LNS is inoperative.

5

4. A method of providing high availability in a network comprising the steps of.
establishing a primary LNS, a peer LNS and a LAC, said primary LNS including state information;

coupling the primary LNS and the peer LNS to a network;

transmitting first information from said CPE to said LAC;

establishing a first tunnel between said LAC and said primary LNS and transmitting first information through said tunnel;

determining whether said primary LNS is functioning;

directly offloading state information from said primary LNS to said the peer LNS:

in response to said determining step, establishing a second tunnel from said CPE to said peer LNS using said state information; and

transmitting second information from said CPE to said LAC,

transmitting information through said second tunnel.

- 5. A system for achieving load balancing comprising:
- a first network;
- a LAC coupled to said first network;
- a primary LNS, said primary LNS including state information and a peer LNS, said primary LNS and said peer LNS being coupled to said first network:
 - a CPE coupled to said LAC;

wherein said primary LNS transfers state information directly to said peer LNS; and

wherein said primary LNS sends said LAC a request to switchover to said peer LNS upon the detection of an overload condition.

- 6. The system of claim 5 wherein said primary LNS sends a switchover request to said 5 LAC.
 - 7. The system of claim 6 wherein said LAC sends a switchover reply in response to receiving said switchover request.
 - 8. The system of claim 5 wherein said LAC determines whether said primary LNS is operative.
 - 9. A system comprising:

a primary LNS, said primary LNS including state information;

a peer LNS;

The light of the l

The second secon

20

a network, said primary LNS and said peer LNS coupled to said network; and means for offloading said state information directly from said primary LNS to said peer

10. A system comprising:

a access concentrator;

LNS.

is the process of the

5

10

15

a primary network server, said primary network server having associated state information;

a peer network server;

a network coupled to said primary network server, said access concentrator, and said peer network server wherein said primary network server directly downloads state information to said peer network server.

- 11. The system of claim 10 wherein said primary network server requests the access concentrator that said peer network server become activated.
- 12. The system of claim 11 wherein said access concentrator determines whether said primary network server is inoperative.
- 13. The system of claim 10 further comprising CPE, wherein said CPE is coupled to said access concentrator.
- 14. The system of claim 10 further including a first tunnel between said access concentrator and said primary server, said tunnel carrying information